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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/731,170	12/10/2003	Yong Cheol Park	0465-1110P	5045

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EXAMINER

GUPTA, PARUL H

ART UNIT	PAPER NUMBER
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2627

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	03/22/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 03/22/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/731,170

Applicant(s)

PARK ET AL.

Examiner

Parul Gupta

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 8 and 20-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8 and 20-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-5, 8, and 20-22 are pending for examination as interpreted by the examiner. The amendment and arguments filed on 12/20/06 were considered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5 and 20-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Takano et al., US Patent 5,448,728.

Regarding claim 1, Takano et al. discloses a method of managing overwrite on an optical disc write once (column 1, lines 40-45), comprising: writing replacement-recording data which is requested to be overwritten in a specified area of the disc where recording is completed in another data area physically separated from the specified area in the disc (column 1, lines 60-61); and recording management information for reproducing the physically replacement-recorded data (column 1, lines 61-64), wherein the management information (in management table of element 20 of figures 10 and 11) includes two entries, the first entry includes start address information of the specified area requested to be overwritten and the replacement-recorded area (column 10, line 16), and the second entry includes end address information of the specified area requested to be overwritten and the replacement-recorded area (column 10, line 17). As explained in column 10, lines 46-54, this will track more than only updated areas.

Regarding claim 2, Takano et al. discloses in figure 10B the method of claim 1, wherein the data requested to be overwritten is replacement-recorded before an outer spare area (F or F2) among the data area of the disc (column 9, lines 48-62).

Regarding claim 3, Takano et al. discloses the method of claim 1, wherein the data which is requested to be overwritten is consecutively replacement-recorded after a final data recording position ("last data-written block") among the data area of the disc (column 6, lines 2-8).

Regarding claim 4, Takano et al. discloses in figure 10B the method of claim 1, wherein the data which is requested to be overwritten is replacement-recorded in an overwrite area (21) separately allocated in the data area of the disc (column 9, lines 53-55).

Regarding claim 5, Takano et al. discloses in figure 10B the method of claim 1, wherein the data which is requested to be overwritten is replacement-recorded in a spare area (21) of the disc (column 9, lines 53-55).

Regarding claim 20, Takano et al. discloses in figure 1 an apparatus for recording/reproducing an optical disc write once (column 1, lines 40-45), comprising: a recording/reproducing device for judging whether a specified area which is requested to be overwritten is an area where recording is completed or an area where no recording ("non-writing area") is performed (column 1, lines 57-61), and recording data in a replacement area of a data area and recording a management information regarding the replacement recording data if it is judged that the specified area is the area where the recording is completed (column 7, lines 31-43 explain more clearly how and where the

information is recorded), wherein the management information (in management table of element 20 of figures 10 and 11) includes two entries, the first entry includes start address information of the specified area requested to be overwritten and the replacement area (column 10, line 16), and the second entry (data size) includes end address information of the specified area requested to be overwritten and the replacement area (column 10, line 17). As explained in column 10, lines 46-54, this can be used to track more than only updated areas.

Regarding claim 21, Takano et al. discloses a recording medium comprising: a data area ("storage area" as given in column 7, line 32) including an area being usable as a replacement area; and at least one management area (where "management data" of column 7, lines 55-56 is written) for storing management information, the management information (in management table of element 20 of figures 10 and 11) including consecutive two entries, the first entry including start address information of an original area and the replacement area (column 10, line 16), the second entry (data size) including end address information of the original area and the replacement area (by providing the start address and data size, the end address can inherently be derived), wherein the original area is an area of the data area which is requested to be overwritten (column 10, line 17). As explained in column 10, lines 46-54, this can be used to track more than only updated areas.

Regarding claim 22, Takano et al. discloses in figure 1 the recording medium of claim 21, wherein the recording medium is a write once optical disc (column 7, lines 13-14).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takano et al. in view of Hwang et al., US Patent Publication 2004/0076096.

Takano et al. teaches the limitations of independent claim 1 as set forth above, but fails to teach the further limitations of claim 8. Hwang et al. teaches a method, wherein the management information is recorded in a temporary defect management area of the disc (paragraph 0048). It would have been obvious to one of ordinary skill in the art at the time of the invention to include the concept of recording management information into the TDMA of the disc as taught by Hwang et al. into the system of Takano et al. The motivation would be to temporarily store the data to quickly update it before storing it in a more permanent location on the disc (paragraph 0049 of Hwang et al.).

Response to Arguments

4. Applicant's arguments with respect to all claims have been considered but are not persuasive or moot.

Applicant contends that Takano does not provide the management information as recited in claims 1 and 20. However, the given management information is equivalent to that claimed since all information not explicitly given can be easily derived based

upon the given information. For instance, by providing the start address and data size, the end address can inherently be derived.

Applicant contends that Fukushima is not directed to managing an overwrite operation of a write once optical disc, and thus does not have the same management information. However, this argument is now moot.

Applicant contends that Fukushima does not teach the entries of the management information in the given partitions. However, this argument is now moot.

Applicant contends that Hwang et al. does not overcome the deficiencies in Takano and Fukushima. However, Hwang et al. is only relied upon for where the management information is recorded, which is taught in paragraph 0048.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Parul Gupta whose telephone number is 571-272-5260. The examiner can normally be reached on Monday through Thursday, from 9:30 AM to 7 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Korzuch can be reached on 571-272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PHG
3/12/07


TAN DINH
PRIMARY EXAMINER

3/19/07